

REMARKS

Claims 1-20 are now pending in the application. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

SPECIFICATION

The specification stands objected to for certain informalities. Applicants have amended the specification according to the Examiner's suggestions. Therefore, reconsideration and withdrawal of this objection are respectfully requested.

REJECTION UNDER 35 U.S.C. § 103

Applicants respectfully traverse the rejection of Claims 1-8 and 10-17 under 35 U.S.C. § 103(a) as being unpatentable over Maxwell et al. (U.S. Pat. No. 5,508,909) in view of Warman et al. (U.S. Pat. No. 5,657,221).

Referring to Claim 1, Maxwell et al. do not show, teach, or suggest a master computer coupled to a first network and including control software with an object oriented model for defining one of attributes, parameters and operations of I/O devices to allow cloning of at least one of the I/O devices, as admitted by the Examiner. **First Office Action, p. 3 (May 7, 2004).**

Warman et al. do not remedy the shortcomings of Maxwell et al. Warman et al. teach a graphical control system for controlling non-computer system devices. The graphical control system employs an object-oriented programming paradigm to control the operation of the non-computer system devices with a personal computer (col. 6, line

32). The personal computer communicates with the non-computer system devices via a bus network.

Neither the graphical control system nor the object-oriented programming paradigm define one of attributes, parameters and operations of the non-computer system devices to allow cloning of at least one of the non-computer system devices, as required by the claims. The graphical control system includes visual device controls (VDCs) that are used to control the non-computer system devices, which include radio amplifiers, tuners, and/or equalizers (col. 9, line 64). The VDCs appear on the personal computer and are graphical representations of the actual controls of the non-computer system devices.

The VDCs are not used to change attributes, parameters, and/or operations of the non-computer system devices. For example, the VDCs are not used to change current limits, voltage limits, or other operating parameters or thresholds of the non-computer system devices. A user manipulates feature controls in the VDCs to control the features of the non-computer system devices (col. 10, line 39). The user receives visual feedback from feature displays in the VDCs, which include LEDs as well as analog and digital displays from the non-computer system devices.

Neither the graphical control system nor the object-oriented programming paradigm allow cloning of the non-computer system devices. Icons that represent the non-computer system devices automatically appear in a network inventory window of the graphical control system when the non-computer system devices are initially connected to the common bus network (col. 18, line 17). A user activates the icons to initiate the visual device controls (VDCs). Therefore, non-computer system devices are

not created within the graphical control system. For example, in the graphical control system taught by Warman et al., a user cannot copy an existing icon representing a first non-computer system device to create a second non-computer system device that includes the attributes of the first non-computer system device.

Warman et al. teach that a user may create a "cloned" visual device control (VDC) within the graphical control system (col. 20, line 63 and shown in FIG. 12). However, cloned VDCs are functionally interchangeable with VDCs from which the cloned VDCs are copied. In other words, a user may manipulate either the original VDC or the associated cloned VDC to control the same device (col. 21, line 24). Therefore, the cloned VDC is not used to control a different non-computer system device. Additionally, a user does not clone a VDC to configure a new non-computer system device with similar attributes to the non-computer system device of the original VDC.

Applicants teach a system for cloning input/output (I/O) devices connected to a network of an industrial control system. In paragraph [0005] of the application, Applicants state that an industrial process may include hundreds of I/O devices that each include over 100 attributes. The object oriented model taught by Applicants automatically clones I/O devices including the attributes and/or operating parameters of the I/O devices. For example, a user may configure a first I/O device with a set of attributes. The user may then copy the first I/O device to create a second I/O device. Attribute values of the second I/O device may then be modified if desired. Therefore, the system taught by Applicants significantly reduces time and computing resource usage.

Claims 2-9 depend directly or indirectly from Claim 1 and are allowable over Maxwell et al. and Warman et al. for the same reasons.

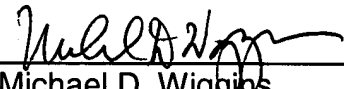
Referring to Claim 10, the arguments made above with respect to Claim 1 are equally applicable to Claim 10. Therefore, Applicants believe that Claim 10 is allowable over Maxwell et al. and Warman et al. for the same reasons. Claims 11-20 depend directly or indirectly from claim 10 and are also allowable over Maxwell et al. and Warman et al. for the same reasons.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: 8/6/04

By: 
Michael D. Wiggins
Reg. No. 34,754

HARNESS, DICKEY & PIERCE, P.L.C.
P.O. Box 828
Bloomfield Hills, Michigan 48303
(248) 641-1600

MDW/wmt